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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,181	10/30/2003	Chun-Mu Huang	DF-03100	9907

7590 12/28/2004

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EXAMINER
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GREENE, DANA D

ART UNIT	PAPER NUMBER
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3762

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/698,181

Applicant(s)

HUANG, CHUN-MU

Examiner

Dana D. Greene

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10-30-2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Claim Objections***

1. Claims 9, 14, and 15 are objected to because of the following informalities:

- a. Claim 9 is objected to because "strewed onto" should read "screwed onto".
- b. Claim 14 is objected to because "clam 1" should read "claim 1".
- c. Claim 15 is objected to because "raid signal" should read "said signal".

Appropriate correction of claims 9, 14, and 15 is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. To be an "anticipation" rejection under 35 U.S.C. § 102, the reference must teach every element and recitation of the Applicant's claims. Rejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art. Thus, the reference must clearly and unequivocally disclose every element and recitation of the claimed invention.

4. A claim is anticipated if each and every element as set forth in the claim is found either expressly or inherently in a single prior art reference. Verdegaal

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Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053

(Fed. Cir. 1987). Here, claims 1-5, 16-18, and 20 stand rejected under 35 U.S.C. §102(b) as being anticipated by Nissila (U.S. Patent No. 6,832,109 B2, hereinafter "Nissila"). Referring specifically to claims 1 and 5, Nissila is considered to disclose:

a transmitter electrode belt (i.e. signal transmitter belt for transmitting a heartbeat signal to a heart rate monitor) to transmit measured heart rate information to a receiver unit carried on the wrist to show cardiorespiratory information (see col. 1, ln. 32-35, Nissila);

an insulating and conductive chest belt with a connection element allowing the chest belt to contact a chest of a user to detect a heartbeat signal and then transmit the signal to a signal transmitter (see col. 6, ln. 19-25, Nissila).

Referring to claims 2-4, Nissila teaches a connecting shaft capable of rotating around the main body and a rectangular shaft (see col. 5, ln. 10-18, Fig. 2, Nissila).

Referring to claim 6, Nissila teaches a belt device with a protrudent portion containing signal-transmitting holes for transmitting a heart beat signal (see col. 5, ln. 5-10, Fig. 2, Nissila).

Referring to claims 16-18, Nissila teaches a cover with components for fixedly mounting connecting elements and for preventing the elements from coming off (see col. 1, ln. 55-65, Nissila). With respect to claim 18, Nissila discloses a skidproof slice mounted in such a way that ensures that the sliding means (device that covers the display area) stays in place on the desired

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location, it comprises a slot that can be engaged with counter pieces provided on the wristband to secure the sliding means in place (see col. 3, ln. 10-15, Nissila).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 7-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nissila in view of Heilman (U.S. Patent No. 5,078,134, hereinafter "Heilman") and further in view of Iguchi (U.S. Patent Pub. 2002/0104200 A1, hereinafter "Iguchi"). Nissila is considered to disclose the claimed invention as discussed above, under the anticipatory rejection, except for the claimed spring mounted and screw portions.

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Referring to claims 7-13, Heilman is considered to disclose a spring mounted on the connecting element (see col. 10, ln. 44-46, Heilman). In this connection, Heilman teaches a spring located beneath a chamber cover that applies pressure to the top of the sensing electrode and to the patient's skin surface, ensuring constant contact between the ECG electrode surface and the skin whenever the system is worn (see col. 10, ln. 44- 50, Heilman). Referring to claims 7-10, Iguchi teaches a fitting screw 44 for transmitting a heartbeat signal to the connecting element (see Figs. 5A and 6B, para. 67, Iguchi). It would have been obvious to one skilled in the art to combine the teachings of Nissila with the spring mounted configuration of Heilman and the spring and screw portion of Iguchi for the purpose of transmitting the heartbeat signal to the connecting element.

Referring to claims 14 and 15, Heilman teaches the second spring portion mounted and looped around the connecting element (see col. 7, ln. 5-10, Heilman). Heilman discloses exactly a member with headed ends which attach to and retain two spring loaded equalizer bars allowing springs to exert force upon the bars (see col. 7, ln. 5-10, Heilman). Iguchi teaches a fitting screw 44 for transmitting a heartbeat signal to the connecting element (see Figs. 5A and 6B, para. 67, Iguchi). It would have been obvious to one skilled in the art to combine the teachings of Nissila with the spring mounted configuration of Heilman and the spring and screw portion of Iguchi for the purpose of transmitting the heartbeat signal to the connecting element.

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Claim 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Nissila in view of Heilman. Nissila is considered to disclose the claimed invention as discussed above, under the anticipatory rejection, except for the claimed rotating angle of 180 degrees. However, Heilman discloses a rotating angle of 180 degrees corresponding to the main body for providing flexibility to the signal-transmitting belt (see Figs. 5A and 14, para. 85, Heilman). It would have been obvious to one of ordinary skill in the art to combine the teachings of Nissila with the rotating angle of Heilman to provide flexibility to the transmitting signal belt.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana D. Greene whose telephone number is (703) 305-0851. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dana D. Greene



George Manuel

Primary Examiner